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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/374,740	08/13/1999	PAUL AUSTIN	5150-32801	4091

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EXAMINER

EDELMAN, BRADLEY E

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 05/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/374,740	AUSTIN ET AL.
	Examiner	Art Unit
	Bradley Edelman	2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 March 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-57 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____ .
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

This action is in response to Applicant's amendment and request for reconsideration filed on March 19, 2003. Claims 1-34 and 36-57 are presented for further examination. Claims 1-3, 14, 19, 28, and 31-33 have been amended. Claims 36-57 are new claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-34, and 36-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viswanathan et al. (U.S. Patent No. 6,047,332, hereinafter "Viswanathan"), in view of Pallmann (U.S. Patent No. 6,094,684).

In considering claims 1, 16, 31, 43, and 48, Viswanathan discloses a computer-implemented method, system, and medium for enabling access to one or more hardware device data sources or targets (106, 112, 114, 116, 118, etc.) in a computer system (col. 8, lines 61-65), comprising:

means for automatically determining one or more data sources or targets connected to the computer (col. 8, line 60 – col. 9, line 2, wherein computer 202 uses global file system 206 to determine which sources or targets are connected to the computer);

means for automatically generating one or more logical names for each of the data sources or targets (col. 10, lines 1-3; col. 11, lines 37-38; col. 15, lines 10-22);

wherein each of the logical names is usable for reading data from the source or writing data to the target (col. 11, lines 46-48, wherein by gaining access to the device through the logical name necessarily reads or writes information from or to the device).

However, the system taught by Viswanathan does not use the term “URL” (i.e. uniform resource locator) in describing the logical names. Viswanathan instead uses the term “identifier” and “globally unique logical name” for the devices (see Abstract; see col. 11, lines 30-38), and further describes the structure of such logical names as including a string, “/devices/hostid/...” (col. 14, lines 13-14, 50-60). This description by Viswanathan is in fact that of a URL – a uniform or universal address to a resource that is used to locate the resource. Nonetheless, Applicant has argued that according to Applicant’s specification, the term “URL” in the claims is limited to the URLs that are accessible on the Web – see Applicant’s response filed on July 30, 2002, p. 6, lines 7-9. Thus, Examiner now interprets the term “URL” to mean an Internet URL.

Although Viswanathan does not explicitly disclose the use of Internet URLs to access the sources or targets, network access systems that use globally unique names to provide access to network devices, wherein the globally unique names are Internet URLs are well known, as evidenced by Pallmann. In a similar art, Pallmann discloses a data access system for accessing remote network devices that are addressed via globally unique names, wherein the unique names are Internet URLs (col. 8, lines 30-68, wherein HTTP over TCP/IP uses Internet URLs). Thus, given the teaching of

Pallmann, a person having ordinary skill in the art would have readily recognized the desirability and advantages of allowing the globally unique logical names taught by Viswanathan to be Internet URLs, so that users can access the devices taught by Viswanathan from anywhere in the world (see Pallmann, col. 9, lines 8-10, "enabl[ing] users to obtain data from and deliver to computers in locations across the Earth through the Internet"). Thus, it would have been obvious for the globally unique logical names taught by Viswanathan to comprise Internet URLs, as taught by Pallmann.

In considering claims 2, 17, 32, and 49, Viswanathan further discloses that the data sources and targets include addressable data sources and targets of a hardware device physically coupled to the computer system (col. 8, lines 61-65).

In considering claims 3 and 19, Viswanathan further discloses including configuration information in the logical names, wherein the configuration information is operable to be used for reading data from the source or writing data to the target (col. 11, lines 57-59, wherein the configuration information is used to create the logical name, and the logical name necessarily may be used for reading or writing to or from the source or target).

In considering claim 4, Viswanathan further discloses querying a database (DCS database) to obtain information regarding a data source or data target, and generating logical names based on the obtained information (col. 12, lines 36-41).

In considering claim 5, Viswanathan further discloses that the hardware devices are connected to the computer (col. 8, lines 61-65), wherein the automatically generating comprises:

querying a database to obtain device information regarding one or more of the hardware devices, wherein the querying includes determining the addressable data sources and targets of the device(s) (col. 12, lines 36-41; col. 11, lines 30-36); and generating one or more logical names based on the device information and the addressable data sources and targets thus obtained (col. 11, lines 37-38).

In considering claim 6, Viswanathan further discloses the device information including device configuration information, wherein the generating comprises including device configuration information in one or more logical names identifying hardware device data sources or targets (col. 11, lines 57-59).

In considering claims 7, 18, 47, and 50, although the system taught by Viswanathan and Pallmann discloses substantial features of the claimed invention, it fails to disclose that the hardware devices may include one of DAQ, GPIB, VXI, PXI, and serial devices. Nonetheless, applicant's admission of the prior art discloses that inputting and outputting information to these devices is well known (see specification, p. 2, line 29 – p. 3, line 1). Viswanathan further discloses the use of printer devices, communication devices, storage devices, and other types of devices (see Fig. 5). Thus,

it would have been obvious to a person having ordinary skill in the art to include any devices in the URL creation system taught by Viswanathan and Pallmann, so that all new devices connected to the computer can be accessed from a remote location.

In considering claim 8, although the teaching of Viswanathan and Pallmann discloses substantial features of the claimed invention, it fails to disclose the use of two separate databases, one for querying information regarding a first device, and another for querying information regarding a second device. Nonetheless, the use of two separate databases is a mere matter of design choice, and it would have been obvious to a person having ordinary skill in the art to use two separate databases instead of one large central database, because employing two smaller databases would reduce the amount of time necessary to retrieve data from the databases, thereby creating a faster, and more efficient system.

In considering claim 9, Viswanathan further discloses connecting a new device to the computer (col. 10, lines 4-5), wherein said querying comprises obtaining device information regarding the new device, wherein the querying includes determining the addressable data sources and targets of the new device, and wherein the logical names include one or more logical names for one or more addressable data sources and targets of the new device (col. 9, line 66 – col. 10, line 12).

In considering claims 10, both Viswanathan and Pallmann further teach that the global unique logical names are operable to be included in an application program for reading data from or writing data to a data target (Viswanathan, col. 11, lines 37-38, 46-48, wherein using a "globally unique logical name," "an application on any node can employ the file system to view and access all of the devices on the cluster;" Pallmann, col. 8, lines 30-49, wherein a user enters an HTTP command (which inherently consists of entry of a URL into a browser or other application) to access the remote data source or target).

In considering claims 11, 29, 33, and 56 both Viswanathan and Pallmann further teach providing one or more of the logical names/URLs to an application program, wherein the application program is operable to access the data source or data target identified by the logical name/URL (Viswanathan, col. 11, lines 37-38, 46-48; Pallmann, col. 8, lines 30-49).

In considering claims 12, 30, 34, and 57 Pallmann further discloses a data socket client, wherein the data socket client uses the URL to connect to the data source or target identified by the URL and read data from it or write data to it (col. 8, lines 30-49, inherent in using a browser to access a target or source via entry of http commands).

In considering claim 13, both Viswanathan and Pallmann further disclose integrating the logical names/URLs within the computer operating system, wherein the

logical names/URLs are accessible via a user interface (inherent in both systems since the logical names/URLs are accessible via a viewable interface and the computers inherently run on an operating system).

In considering claim 14, both Viswanathan and Pallmann further disclose that the URLs are operable to be provided to application programs via said user interface (i.e. the users may access a target or source by entering the URL into an application, Viswanathan, col. 11, lines 37-38, 46-48; Pallmann, col. 8, lines 30-49).

In considering claim 15, both Viswanathan and Pallmann further disclose editing the URLs using said user interface (a user can enter the URL to access a device and thus can edit the existing URL in the interface).

In considering claims 20 and 51, Viswanathan further discloses one or more plug-in modules (link generator) comprised in the memory of the computer system, wherein the plug-in modules interface with the logical name generation manager, wherein each plug-in module is capable of automatically generating logical names to reference a particular type or class or data source or target (col. 10, lines 9-12).

In considering claim 21, Viswanathan further discloses one or more hardware devices connected to the computer system (col. 8, lines 61-65), wherein one or more of the plug-in modules is capable of automatically generating logical names to reference

data sources or targets of a particular type or class of hardware device (col. 10, lines 9-12).

In considering claim 22, Viswanathan further discloses one or more databases which each store information regarding a particular type or class of data source or target (col. 12, lines 36-41), wherein the information includes information regarding the locations or addresses of one or more data sources or targets connected to the computer (col. 12, lines 36-50; col. 11, lines 30-35).

In considering claim 23, Viswanathan further discloses that database information includes configuration information for one or more data sources or targets connected to the computer (col. 11, lines 56-61).

Claim 24 contains no further limitations over claims 21 and 22 combined, and is thus rejected for the same reasons stated with regard to claims 21 and 22.

Claim 25 contains no further limitations over claim 23, and is thus rejected for the same reasons stated with regard to claim 23.

Claim 26 contains no further limitations over claims 20 and 22 combined, and is thus rejected for the same reasons stated with regard to claims 20 and 22.

Claim 27 contains no further limitations over claims 20, 21, and 22 combined, and is thus rejected for the same reasons stated with regard to claims 20, 21, and 22.

In considering claim 28, both Viswanathan and Pallmann further disclose editing the logical names/URLs using an executable program (a user can enter the URL to access a device and thus can edit the existing URL in the interface). Viswanathan further discloses that the logical name includes configuration information (col. 11, lines 57-59, wherein the configuration information is used to create the logical name).

In considering claims 36 and 45, Viswanathan further discloses that a device type of the target or source is automatically determined, and that the logical name is automatically formed based on a device type (col. 4, lines 54-60, wherein the link generator generates a logical name based on the device characteristics).

In considering claim 37, Viswanathan further discloses determining a first device type of a first data source of the one or more data sources or targets, and automatically determining a first template for the first data source based on the first device type, and automatically generating a first logical name based on the first template (col. 15, line 40 – col. 16, line 12).

In considering claim 38, Viswanathan discloses automatically determining a device type of the first data source (col. 10, lines 10-12), automatically determining a

first template for the first data source based on the device type (col. 10, lines 17-20, "DSOs"), and automatically determining a first plug-in module ("link generator") for the first data source based on the first device type (col. 10, lines 10-12), wherein the first plug-in module automatically generates a first logical name from the first data source based on the template (col. 10, lines 12-16).

In considering claim 39, claim 39 contains no further limitations over claims 2 and 36, and is thus rejected for the same reasons as stated previously.

In considering claims 40 and 46, Viswanathan further discloses that the sources and targets include hardware devices physically coupled to the computer, automatically identifying the hardware devices, querying a database to discover information about the hardware devices (i.e. physical name), and automatically generating a logical name for each of the hardware devices based on the obtained information (col. 10, lines 1-15).

In considering claim 44, Viswanathan further discloses determining a first hardware device having a plurality of channels, and automatically generating logical names for the each of the plurality of data channels (col. 14, lines 30-67, wherein different "slices" of the SCSI disk are given different logical names).

In considering claim 41, as discussed with respect to claim 44, Viswanathan further discloses determining a first hardware device having a plurality of channels, and

automatically generating logical names for the each of the plurality of data channels (col. 14, lines 30-67, wherein different “slices” of the SCSI disk are given different logical names). However, Viswanathan does not disclose that the physical devices are data acquisition devices. Nonetheless, applicant’s admission of the prior art discloses that inputting and outputting information to a data acquisition device is well known (see specification, p. 2, line 29 – p. 3, line 1). Viswanathan further discloses the use of printer devices, communication devices, storage devices, and other types of devices (see Fig. 5). Thus, it would have been obvious to a person having ordinary skill in the art to include any devices in the URL creation system taught by Viswanathan and Pallmann, so that all new devices connected to the computer can be accessed from a remote location.

In considering claim 42, Viswanathan further discloses that the obtained information specifies characteristics (i.e. physical name, address, etc.) of the channel of the physical device (col. 14, lines 12-35), wherein automatically generating comprises including information regarding the characteristics in the logical name for each channel (col. 14, lines 36-67, wherein “the logical names map to device physical names”).

In considering claim 52, Viswanathan further discloses one or more databases which each store information regarding a particular type or class of data source or target, wherein said information includes information regarding the locations of one or

more data sources or targets connected to the computer (i.e. physical names, describing type and location of the hardware; col. 10, lines 1-14).

In considering claim 53, Viswanathan further discloses that the database information includes configuration information for one or more data sources or targets connected to the computer (col. 10, lines 43-46).

In considering claim 54, claim 54 contains substantially the same limitations as claims 51 and 52, and is thus rejected for the same reasons stated previously.

In considering claim 55, claim 55 contains substantially the same limitations as claims 49, 51, and 52, and is thus rejected for the same reasons stated previously.

Response to Arguments

In response to Applicant's request for reconsideration filed on August 12, 2002, the following factual argument is noted:

- a. Dickman does not teach or suggest automatically determining one or more data sources or targets connected to the computer, as required by the independent claims.

In considering (a), Applicant contends that Dickman does not teach or suggest automatically determining one or more data sources or targets connected to the computer, as required by the independent claims. Examiner agrees, and has thus applied new art in rejecting the claims previously found anticipated by Dickman.

In addition, Applicant argues that the Viswanathan and Pallmann references relate to different non-analogous fields, and that it would not be obvious to combine the references as proposed by the Examiner.

Examiner respectfully disagrees with this argument. Notably, both Viswanathan and Pallmann discuss a client/server network access system that provides network users with remote access to sources and targets on a network. Both assign global unique identifiers to the sources and targets so that a user can access the sources and targets from anywhere in the network (see Viswanathan, col. 9, lines 6-11, allowing “global access to the devices”; Pallmann, col.8, lines 30-67, allowing “access to millions of publicly available FTP servers on the Internet”). Thus, the references are an analogous art, and it would have been obvious to a person having ordinary skill in the art to combine the features taught by one reference with the features taught by the other, as discussed in the rejections above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

For all After Final papers: (703) 746-7238.

For all other correspondences: (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

BE
May 22, 2003



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